



Abstract of the Disclosure

A mobile ad hoc network (MANET) may include a plurality of mobile nodes each including a wireless communications device and a controller connected thereto operating in accordance with a multi-layer protocol hierarchy. More particularly, the controller may, at an upper protocol layer, establish a quality-of-service (QoS) threshold. Further, at at least one intermediate protocol layer below the upper protocol layer, the controller may determine whether a QoS metric for at least one selected route from at least one source mobile node falls below the QoS threshold. In addition, at a lower protocol layer below the at least one intermediate protocol layer, the controller may cooperate with the wireless communications device to determine the QoS metric for the at least one selected route, and adjust signal reception gain and/or a signal reception pattern based upon a determination that the QoS metric has fallen below the QoS threshold.